

CERCIAPHIS EMBLICA SP. NOV. (FAM. APHIDIDAE)—A
NEW APHID PEST ON EMBLICA OFFICINALIS

BY

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(With a plate)

The genus *Setaphis* is of rather infrequent occurrence and only four species namely *S. luteus* v.d. Goot, *S. viridis* v.d. Goot, *S. bougainvillaceae* Theo. and *S. formosanus* Tak. are known to exist. All of them are from the old world and the first one is the type species. The genus is characterized by the presence of a pair of long setae on the abdomen, media once branched, and the short cornicles. We have been informed by the Director, Commonwealth Institute of Entomology, London, that *Setaphis* v.d. Goot is preoccupied and hence the genus *Cerciaphis* Theobald, which had been sunk as a synonym of *Setaphis*, should be restored. Accordingly a new species of this genus which has come to our notice, is herein described as

***Cerciaphis emblica* sp. nov.**

Description: Alate viviparous female: Average length 1.367 ± 0.022 mm. Head: (Plate I, Fig. 1) citrine drab, flat between the bases of antennae as in genus *Aphis*, with a median ocellus, the other two situated by the inner aspect of the compound eyes. Distance between the bases of antennae 0.164 mm. Rostrum: length 0.380 mm. reaching the third coxae, dark apically. Antennae: five segmented, average length 0.883 ± 0.061 mm., shorter than the body, first, second, and the last segment dark distally, rest citrine drab; third segment longer than fourth, with 14-16 circular, double walled sensoria which are evenly distributed; fourth segment shorter than fifth with 1 or 2 circular double walled sensoria, the primary one situated apically; fifth segment long, flagellum shorter than base with a compound sensorium situated at the apex of the base.

Table 1.—Average lengths of antennal segments of alate forms in mm.

I	II	III	IV	V	
				Base	Flagellum
0.543 ± 0.006	0.635 ± 0.019	0.345 ± 0.0322	0.176 ± 0.147	0.155 ± 0.020	0.0819 ± 0.010

Eyes: Compound eyes prominent and dark. Thorax: In fresh specimens prothorax dark at anterior dorsal border, rest of the dorsum citrine drab but little lighter than the head, sternum pale. Meso and metathorax and dorsum darker than the prothorax, sternum like the dorsum except the posterior border of the metasternum which is paler. Legs: femur, apices of tibia and tarsae dark, average lengths of first, second and third tibia 0.509 ± 0.093 , 0.478 ± 0.049 and $0.599 \pm .152$ mm. respectively. Forewings: (Plate I, Fig. 4 smoky, average length 2.006 ± 0.110 mm., stigma dark, cubitus (or modia of American authors) once branched as in genus *Toxoptera* and *Phloeomyzus*, with bands along the veins giving smoky appearance to wings. Hind-wings: (Plate I, Fig. 5) reduced as in *Microparsus*, and *Pentalonia*; average length 0.430 ± 0.052 mm. Anterior margin with a dark band along a feeble vein—the band widening at the apex of the wing. Abdomen: Malachite green, slightly elongated or oval, lacking hairs.—Cornicles: very short, cone-shaped, of iachnid appearance, slightly striate, provided with one or two very small bristles. Abdomen just above the cauda provided with a pair of long setae (Plate I, Fig 3) measuring 0.186 ± 0.036 mm. projecting horizontally beyond the caudal apex, slightly curved, sharply pointed broad based striate, and provided with a short bristle at the apex. Cauda: (Plate I, Fig. 2) not distinct, slightly dark, rounded uniformly, with some rather long bristles.

Apterous viviparous female: Average length 1.514 ± 0.374 mm. Fresh specimens pale green, with abdomen, head, thorax, legs and cornicles olive buff coloured. Head: (Plate I, Fig. 7) almost flat between the bases of antennae, distance between the bases of antennae 0.171 ± 0.027 mm. frontal tubercles almost absent. Eyes: very small, composed of three facets only. Rostrum: dark apically, reaching the third coxae, somewhat stout and $0.388 \pm .041$ mm. long. Antennae: short, five segmented imbricate with three or four very small hairs. Average length $0.890 \pm .07$ mm.; first two segments, basal half of third and fifth dark, rest pale. Third segment with no sensoria, longer than fourth segment, which has one apical normal sensorium, fifth segment with a compound sensoria situated at the apex of the base.

Table 2.—Average lengths of antennal segments of apterous forms in mm.

I	II	III	IV	V	
				Base	Flagellum
$0.060 \pm .007$	$0.051 \pm .009$	$0.357 \pm .023$	$9.187 \pm .022$	$0.165 \pm .018$	$0.83 \pm .02$

Legs: pale, except tarsae which are darker, provided with a few short bristles, tarsae rather short, roughly imbricate with very long bristles at the apex. Average measurements of fore, mid and hind

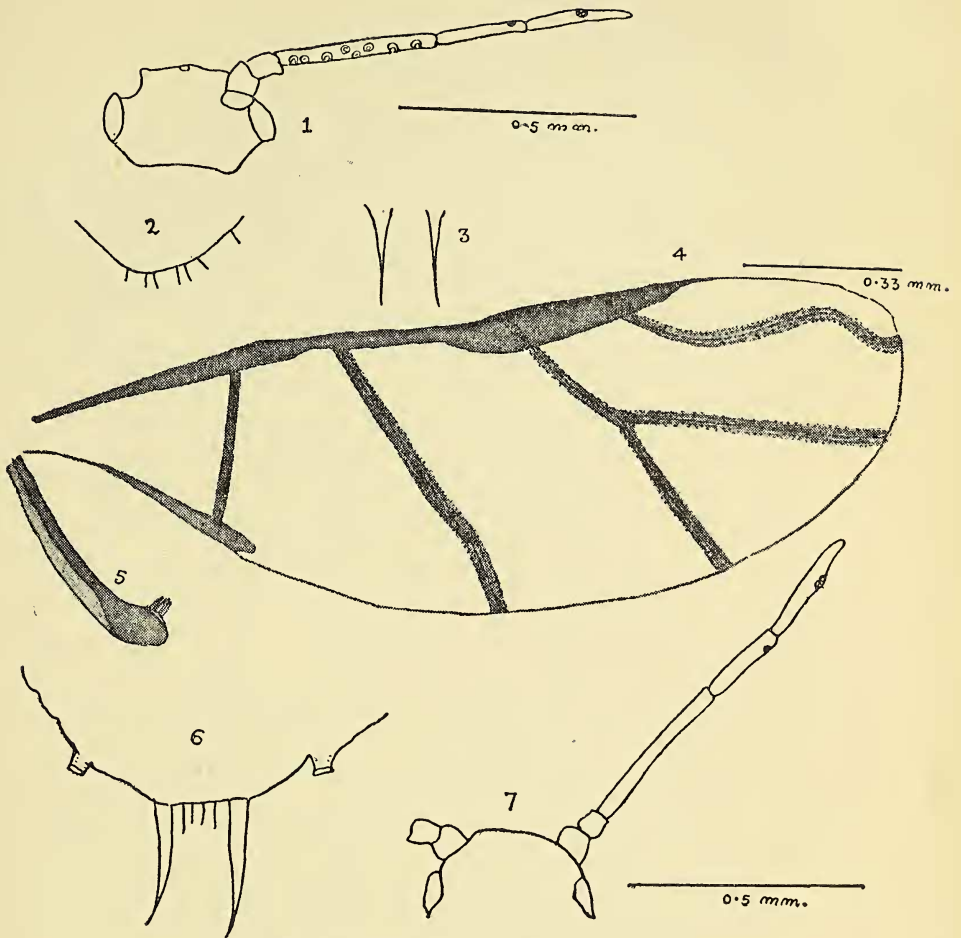


PLATE I *Cerciaphis emblica* sp. nov.

- Fig. 1 Head alate viviparous female.
- Fig. 2 Cauda „ „ „
- Fig. 3 Cerci (setae) alate viviparous female.
- Fig. 4 Fore wing female.
- Fig. 5 Hind wing female.
- Fig. 6 End of abdomen, apterous viviparous female.
- Fig. 7 Head, apterous viviparous female.

